

REMARKS

In the Office Action dated June 9, 2004, the Examiner objected to Fig. 1 for failing to include the recited reference number "100"; objected to claims 17-20 and 35 for including various informalities; rejected claims 1-2, 4-10, 12-17, 19-25, 27-33, 35-40, 42-48, 50-56, and 58-61 under 35 U.S.C. § 102(e) as being anticipated by MALKIN et al. (U.S. Patent No. 6,085,193); rejected claims 1-4, 7-12, 15, 24-27, 30, 32-35, 38-42, 45-50, 53-58 and 61 under 35 U.S.C. § 102(e) as being anticipated by CARNEAL et al. (U.S. Patent No. 6,282,542); and rejected claims 3, 11, 18, 26, 34, 41, 49 and 57 under 35 U.S.C. § 103(a) as being unpatentable over MALKIN et al. in view of CARNEAL et al.

Claims 1-61 were previously pending in the application. Claims 1-2, 4-10, 12, 16-17, 24-25, 27-29, 32, 35, 37, 39, 47-48, 50-52 and 54-56 are amended to improve form. Accordingly claims 1-61 remain pending in the present application. Reconsideration and allowance of all claims in view of the following remarks are respectfully requested.

Initially, the Examiner objected to Fig. 1 for failing to include the recited reference number "100". Accordingly, Fig. 1 has been amended as set forth in detail above and in the attached replacement drawing sheet.

Claims 17-20 and 35 have been objected to for including various informalities. More particularly, claim 17 is objected to for failing to include --(WAN)-- following "network". Claim 17 has been amended in accordance with the Examiner's suggestion. Similarly, claim 35 is objected to for misspelling "pre-loaded" as --pre-load--. Claim 35 has likewise been amended to remedy the noted error. Withdrawal of the pending objections in view of the these amendments is respectfully requested.

Claims 1-2, 4-10, 12-17, 19-25, 27-33, 35-40, 42-48, 50-56, and 58-61 were rejected under 35 U.S.C. § 102(e) as being anticipated by MALKIN et al. Applicant respectfully traverses.

Independent claim 1, as amended, recites a method for providing intelligent caching. The method includes receiving a traffic stream. The traffic stream is analyzed for first content. A profile based on the first content is generated and transmitted to a

remote location. A master profile is generated based on the received profile. Second content associated with the master profile is retrieved at the remote location. The second content is received from the remote location.

A proper rejection under 35 U.S.C. § 102 requires that a reference teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. See M.P.E.P. § 2131. MALKIN et al. does not disclose or suggest the combination of features recited in Applicant's amended claim 1.

For example, MALKIN et al. does not disclose or suggest generating a profile based on first tier content and transmitting the profile to a second cache engine. The Examiner relied upon col. 8, lines 38-52 for allegedly disclosing both receiving a profile and generating a master profile (Office Action, pg. 3). Applicant respectfully submits that this section of MALKIN et al. does not disclose or suggest generating a profile based on the first content and transmitting the profile to a second cache engine, as required by claim 1.

At col. 8, lines 38-52, MALKIN et al. discloses:

Third, in block 104 the content server 20 generates prefetch hint information (PHI) on related accesses to the requested information based on the data reference patterns identified in block 102. Fourth, in block 105 the prefetch hint information may annotate the requested information. For example, the prefetch hint information may be conveyed as meta data piggy-backed with the requested information (i.e. object). With respect to the step of establishing or generating prefetch hint information, content servers 20 track usage/reference patterns from a large number of concurrent users or clients. In practice, the content servers 20 determine which group of objects are related to the requested information or requested object. The content servers 20 generates and provide a prefetch hint information (PHI) with the requested object.

This section of MALKIN et al. discloses annotating prefetch hint information (PHI) to content transmitted from a content server to a proxy server and on to a client (see Figs. 2 and 3A). This PHI is utilized by the proxy server and/or client server to dynamically prefetch content (col. 3, lines 26-41). The content server initiated prefetch content is not equivalent to the profile of the present invention in that the profile is generated at a first cache engine and transmitted to a second cache engine.

Additionally, MALKIN et al. does not disclose or suggest generating a master profile, retrieving second tier content associated with the master profile, and transmitting the second tier content to the first cache engine, as required by amended claim 1. Rather, the system of MALKIN et al. relies upon PHI annotated to an original response from a content server to indicate which information regarding the request may be subsequently prefetched.

For at least the reasons set forth above, Applicant respectfully submits that claim 1 is not anticipated by MALKIN et al.

Dependent claims 2 and 4-8 depend from claim 1. Accordingly, these claims are not anticipated by MALKIN et al. for at least the reasons set forth above with respect to claim 1.

Independent claims 9, 16, 24, 32, 39, 47 and 55, as amended, recite similar subject matter as that described above, with respect to claim 1. Accordingly, these claims are also not anticipated by MALKIN et al. for at least reasons similar to those set forth above with respect to claim 1.

Dependent claims 10 and 12-15 depend from claim 9. Dependent claims 17 and, 19-23 depend from claim 16. Dependent claims 25 and 27-31 depend from claim 24. Dependent claims 33 and 35-38 depend from claim 32. Dependent claims 40 and 42-46 depend from claim 39. Dependent claims 48 and 50-53 depend from claim 47. Dependent claims 55-56 and 58-61 depend from claim 54. Accordingly, each of these claims are also not anticipated by MALKIN et al. for at least reasons similar to those set forth above with respect to claims 9, 16, 24, 32, 39, 47 and 55.

Claims 1-4, 7-12, 15, 24-27, 30, 32-35, 38-42, 45-50, 53-58 and 61 were rejected under 35 U.S.C. § 102(e) as being anticipated by CARNEAL et al. Applicant respectfully traverses.

As discussed above, independent claim 1, as amended, recites a method for providing intelligent caching. The method includes receiving a traffic stream. The traffic stream is analyzed for first content. A profile based on the first content is generated and transmitted to a remote location. A master profile is generated based on the received profile. Second content associated with the master profile is retrieved at the remote

location. The second content is received from the remote location. CARNEAL et al. does not disclose or suggest the combination of features recited in Applicant's amended claim 1.

For example, CARNEAL et al. does not disclose or suggest generating a profile based on first tier content and transmitting the profile to a second cache engine. The Examiner relied upon col. 8, lines 30-43 for allegedly disclosing a profile (Office Action, pg. 5). Applicant respectfully submits that this section of CARNEAL et al. does not disclose or suggest generating a profile based on the first content and transmitting the profile to a second cache engine, as required by claim 1.

At col. 8, lines 30-43, CARNEAL et al. discloses:

Prior to, during or after transmission of the transfer of block 86, the satellite gateway parses the parent file, extracts an external reference to an inline object and forwards a surrogate request for the inline object over the Internet 24 in block 92. For example, the satellite gateway 72 may comprise a parsing module and a surrogate request generation module to carry out these functions. Also in block 92, the satellite gateway 72 sends a message to the access point 70 identifying the inline object which it is prefetching. For example the satellite gateway 72 may comprise a message module which creates and sends messages to the access point 70. In block 94, the access point 70 receives the prefetch object listing and stores it for later reference, such as within a caching module.

This section of CARNEAL et al. discloses the prefetching operation of the satellite gateway. Essentially, upon receiving a request for a parent file from a client, the satellite gateway initially forwards the request to the web server and receives the requested document. Simultaneously, the gateway examines the document for inline objects (e.g., images, audio, etc.). The gateway then generates surrogate requests for the inline objects and caches the responses for subsequent retrieval by the client. In a conventional system, the client would need to examine the document for these objects and perform repeated queries for the objects over the network. The system of CARNEAL et al. prevents the client from needing to request the imbedded objects over the satellite link, thus increasing responsiveness. Clearly, the inline object prefetching process of CARNEAL et al. is not equivalent or does not suggest generating a profile

based upon first tier content at a first cache engine, and transmitting the profile to a second cache engine, as required by claim 1.

Additionally, CARNEAL et al. does not disclose or suggest generating a master profile, retrieving second tier content associated with the master profile, and transmitting the second tier content to the first cache engine, as required by amended claim 1. Rather, the system of CARNEAL et al. performs prefetching of information directly related to a specific document request. No content profile is transmitted to a second cache engine, no master profile is generated based on the profile and no second tier content associated with the master profile is retrieved and transmitted to the first cache engine.

For at least the reasons set forth above, Applicant respectfully submits that claim 1 is not anticipated by CARNEAL et al.

Dependent claims 2-4 and 7-8 depend from claim 1. Accordingly, these claims are not anticipated by CARNEAL et al. for at least the reasons set forth above with respect to claim 1.

Independent claims 9, 24, 32, 39, 47 and 55, as amended, recite similar subject matter as that described above, with respect to claim 1. Accordingly, these claims are also not anticipated by CARNEAL et al. for at least reasons similar to those set forth above with respect to claim 1.

Dependent claims 10-12 and 15 depend from claim 9. Dependent claims 25-27 and 30 depend from claim 24. Dependent claims 33-35 and 38 depend from claim 32. Dependent claims 40-42 and 45-46 depend from claim 39. Dependent claims 48-50 and 53 depend from claim 47. Dependent claims 55-58 and 61 depend from claim 54. Accordingly, each of these claims are also not anticipated by MALKIN et al. for at least reasons similar to those set forth above with respect to claims 9, 24, 32, 39, 47 and 55.

Claims 3, 11, 18, 26, 34, 41, 49 and 57 were rejected under 35 U.S.C. § 103(a) as being unpatentable over MALKIN et al. in view of CARNEAL et al. Applicant respectfully traverses.

Claim 3 depends from claim 1. The disclosure of CARNEAL et al. does not remedy the deficiencies in MALKIN et al. Accordingly, claim 3 is believed to be

patentable over the combination of MALKIN et al. and CARNEAL et al. for at least reasons similar to those set forth above with respect to claim 1. Claim 11 depends from claim 9. Claim 11 is believed to be patentable over the combination of MALKIN et al. and CARNEAL et al. for at least reasons similar to those set forth above with respect to claim 9. Claim 18 depends from claim 16. Claim 18 is believed to be patentable over the combination of MALKIN et al. and CARNEAL et al. for at least reasons similar to those set forth above with respect to claim 16. Claim 26 depends from claim 24. Claim 26 is believed to be patentable over the combination of MALKIN et al. and CARNEAL et al. for at least reasons similar to those set forth above with respect to claim 24. Claim 34 depends from claim 32. Claim 34 is believed to be patentable over the combination of MALKIN et al. and CARNEAL et al. for at least reasons similar to those set forth above with respect to claim 32. Claim 41 depends from claim 39. Claim 41 is believed to be patentable over the combination of MALKIN et al. and CARNEAL et al. for at least reasons similar to those set forth above with respect to claim 39. Claim 49 depends from claim 47. Claim 49 is believed to be patentable over the combination of MALKIN et al. and CARNEAL et al. for at least reasons similar to those set forth above with respect to claim 47. Claim 57 depends from claim 55. Claim 57 is believed to be patentable over the combination of MALKIN et al. and CARNEAL et al. for at least reasons similar to those set forth above with respect to claim 55.

In view of the foregoing amendments and remarks, Applicant respectfully requests the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-0383 and please credit any excess fees to such deposit account.

Respectfully submitted,

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